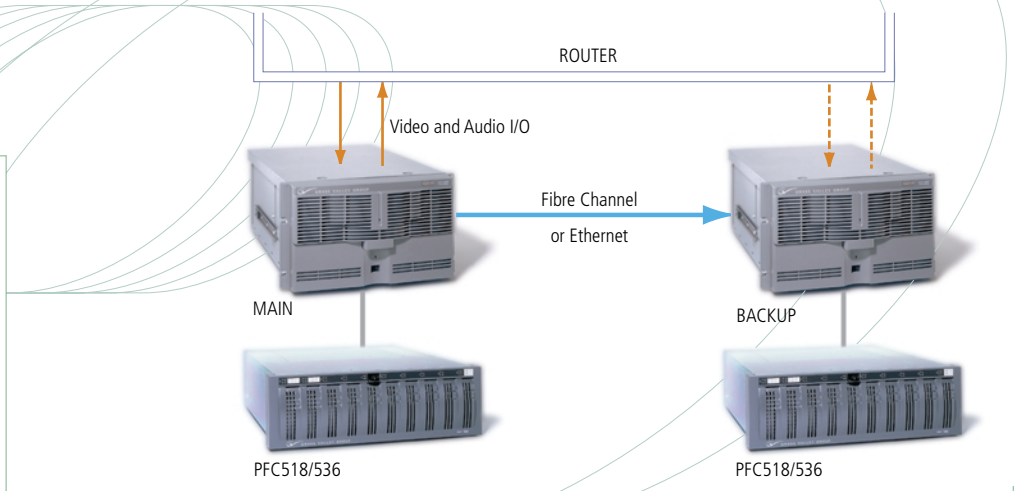
GRASS VALLEY GROUP

INSYNC

AUTOMATIC MIRRORING SOFTWARE FOR PROFILE

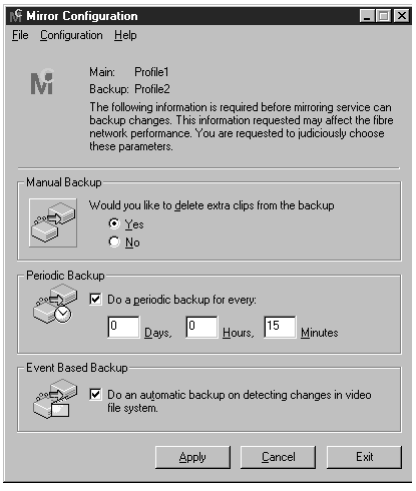
PRODUCT DATA SHEET

InSync automatically keeps two Profile file systems synchronized via Fibre Channel or 100-baseT Ethernet. Setup is easy and straight forward and operation is transparent to the user and the controlling application. If the "main" server goes off-line, the user switches the router to the "backup" server.



KEY FEATURES

- Automatically keeps two Profile systems synchronized with identical content
- Supports PDR200/300/400 & PVS1000/2000
- Restores file system after repair
- Runs independent of application software
- Transparent operation
- Low latency
- Supports both Fibre Channel or Ethernet connections
- Any networked Profile server can be designated as backup
- Simple operation
- Error logging



Automatic Mirrored Operations

Regardless of how reliable any broadcast device is, for mission critical applications like broadcast, many facilities require full redundancy in their play-to-air servers. Normally the responsibility of the controlling application, disk mirroring can add significantly to the complexity of the application. Now with InSync, the task of mirroring is done within the Profile system. As such, it can operate with any application. InSync assures that the contents of two systems are maintained as a mirrored pair. In event of a failure the user routes control of the replay function to the Backup system which InSync keeps synchronized with the Main.

Mirrored Operations (Examples)

MAIN SERVER	BACKUP SERVER
New Clip/Group	Clip/Group copied to Backup
Delete Clip/Group	Clip/Group deleted on Backup
Edit File	Edit changes copied to Backup (user initiated or during periodic backup)

Mirroring takes place whenever a new file is recorded on the main server either via a baseband record or a network transfer.

MIRRORING OPTIONS

Users have three options for mirroring. Event based backup is the normal operation which initiates file transfers immediately and keeps the file systems synchronized as fast as possible. Manual backup resynchronizes the file systems when bringing a system back on line.

Operation When a Failure Occurs

If the Main server fails, or needs to be taken off-line for maintenance or updates, the Backup unit takes over as the Main allowing both record and replay operations to continue. When the unit is brought back on-line, InSync provides an Update mode, which performs a user initiated re-synchronization. Any changes made while the system was off-line will be reflected on the server when it is brought back on-line. With high-speed Fibre Channel networking, this re-synchronization occurs quickly.

In addition, when a server is taken off-line, a third server can be added to ensure continued mirrored operation.

SPECIFICATIONS

Profile Requirements

- Profiles should be configured identically[1]
- Storage on both units should be identical[2]
- Units need to be networked together
- Supports one Main and one Backup server
- Allows a substitute Backup server to be specified under failure conditions

Profile Network Connections

- Fibre Channel (requires opt 1F)
- Ethernet (requires opt 1L)

Start-up Modes

- Backup: copies Main files to the Backup
- Update: copies Backup files to the Main
- None: simply start the mirror process

Operating Modes

- Event Based: automatically mirror events as they occur on the Main
- Periodic: synchronize files system at user defined intervals
- Manual: manually synchronize files system
- Event based & Periodic Mirroring can be optionally disabled

1) *If not configured the same, care should be taken to ensure that the same number of active channels (channels used for record and play) are available on each system.*

2) *If storage systems are not the same, care should be taken to ensure that the unit with the least amount of storage sets the limit for operation.*

Ordering Information

PART NUMBER	DESCRIPTION
INSYNC	InSync Software: Single License. Distributed on CD with User Manual

License Requirements

- One License is required for each pair of Mirrored Profiles

Warranty

Products offered by Grass Valley Group are manufactured to provide the highest level of reliability and performance. Grass Valley Group warrants these products against defects in materials and workmanship in accordance with the warranty statement applicable with each product.

Standard product warranty is one year from the date of installation or 15 months from the date of shipment; whichever is earlier. Warranty coverage includes:

- Hardware support with advance exchange of parts shipped next business day
- Software support includes automatic shipment of software maintenance releases
- After hours emergency phone support

Complimentary Services

Technical phone support via our 1-800-547-8949 number during regular business hours and technical e-mail support. In addition to our call center, we offer on-line technical resources and parts ordering via our web site at www.grassvalleygroup.com/support.

Value Added Services[1]

- **SmoothStart℠ and On-Site Installation Support Services –** Critical startup services to get you going. These services include pre-installation planning, on-site checkout, on-site overview training as well as customized networking and system support services
- **Comprehensive Service Contracts –** Up to 5 years beyond initial warranty which includes advanced exchange of parts shipped next business day, proactive software subscription support, after hours emergency phone support and discounts on our training classes and field support operations
- **On-Site or Factory Training –** Operations, advanced operations and technical/maintenance training
- **Spares Kits –** For mission-critical applications, our parts kits ensure maximum on-air time

1) *Some value-added services are available for specific products only. Please contact your sales representative for details by product.*

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